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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/560,091 | 12/09/2005 | Klaus Saitmacher | 2003DE120 | 9477 |
| 25255 7590 08/13/2008 CLARIANT CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 4000 MONROE ROAD CHARLOTTE, NC 28205 | | | EXAMINER MANOHAR, MANU M | |
| | | | ART UNIT 4161 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,091

Applicant(s)

SAITMACHER ET AL.

Examiner

MANU MANOHAR

Art Unit

4161

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8, 10, 11 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 6, 10, 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 8 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date August 22, 2006, March 10, 2006

DETAILED ACTION

The status of the Claims

Claims 1-17 are pending in the application. Original claims 1-15 were subjected to restriction and election of species. The details are below.

Election and Restriction

Applicant's election of Group II, claims 7-9 and 12-15 in the reply filed on July 28, 2008 is acknowledged. The applicants elected the following species. For claim 7- compounds isolated from plant material. For claim 15 - a synthetic material. Examiner considers the new claims 16 and 17 in this application.

Claims 1-4, 6, 10 and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 28, 2008.

Priority

This application Foreign Priority Date of June 11, 2003 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi et al, Japan Patent Application, JP2000226545A (Listed in International Search Report) in view of Vincent et al, US 6,556,470.

Claim 7 is drawn to a aqueous colorant preparation comprising 0.1% to 50% by weight of at least one heavy metal complex colorant, 001% to 0.1% by weight of an antimicrobial mixture, wherein mixture is mixture of 5-chloro-2-methyl-4-isothiazolin-3-one, 2-methyl-4-isothiazolin-3-one and 2-bromo-2-nitorpropane-1,3-diol and 10% to 90% by weight of deionized water and all based on the total weight (100% by weight) of the colorant preparation.

Claim 8 is drawn to a aqueous colorant preparation comprising at least 20 ppm of heavy metal ions and 0.1% to 50% by weight of at least one colorant, 0.0001% to 0.1% by weight of an antimicrobial mixture, wherein mixture is mixture of 5-chloro-2-methyl-4-isothiazolin-3-one, 2-methyl-4-isothiazolin-3-one and 2-bromo-2-nitorpropane-1,3-diol and 10% to 90% by weight of deionized water and all based on the total weight (100% by weight) of the colorant preparation.

Hitoshi et al teaches the use of antimicrobials 5-chloro-2-methyl-4-isothiazolin-3-one, 2-methyl-4-isothiazolin-3-one and 2-bromo-2-nitorpropane-1,3- diol (page 4 of translated document-claim 2) at various concentration including 0.01% (Page 21 paragraph 0063). It also teaches the use of heavy metal complex colorant (Page 13 paragraph 0032, page 16 paragraph 0047), reactive dyes, direct dyes, acid dyes, disperse dyes and pigments, according to specification page 3 line 22 and 23, and it

teaches the concentration of colorant is 5% (Page 27- Table 7-9 statement). In addition it teaches the use of heavy metals in the composition (page 12 paragraph 0026) and the composition uses the deionized water (page 20, paragraph 0061). This reference also specify heavy metal complex colorant, pigment red, pigment yellow in the composition (Page 16-paragraph 0047). This reference do not specifically teach heavy metals comprising at least 20ppm, however, modifying the concentration of heavy metals to be at least 20 ppm amounts to routine optimization

Claim 15 is drawn to a fibrous composition produced with the aqueous colorant composition wherein fibrous composition is a natural or synthetic material (elected species synthetic material). Examiner presumed that the material (fibrous) is a part of the invention in which the aqueous colorant is used or the material on which the colorant preparation is used. Hitoshi et al teaches the use of several materials for the composition including glossy papers (page 21- 2nd paragraph).

Claim 16 is drawn to recording fluid comprising the aqueous colorant preparation. Claim 17 is drawn to ink jet ink comprising the aqueous colorant preparation. Hitoshi et al teaches the preparation of jet ink in their invention (Page 1-Title, Page 3-abstract, page4-claim 4). It is known that ink for inkjet belongs to family of recording fluid, in other words recording fluid is a general term used for all the ink used in various recorders, hence this references teaches the use of recording fluid.

Hitoshi et al do not specifically teach the use of electronic inks, electronic papers and color filters. Vincent et al teaches the use electronic papers and inks.

Claim 14 is drawn to a composition produced with the aqueous colorant composition as claimed in claim 7, wherein the composition is selected from the group consisting of color filters, electronic inks and electronic paper. Vincent et al teaches the use of electronic ink, electronic paper with ink using liquid coating methodology (Column 4 line 1-5 and line 15-18). Even though this reference do not specify color filter it inherently reveal the use of various filtering methodology for different colors (column 4- line 8 – 14).

Hitoshi et al teaches the use of ink fluid or recording fluid with antimicrobial agents containing heavy metals, colorant for fibrous materials. However it does not teach about electronic ink or paper. It also does not specifically teach the mixture of three antimicrobial agents of the instant claims 7 and 8 however it teaches the use of several antimicrobial agents including the three agents in the claims. As the agents are functionally equivalent, it would be obvious to one in the ordinary skill to choose any combination for the composition including the three in the instant claims. Vincent et al specifically teach the use of electronic ink and papers. The combined teachings of Hitoshi et al, in view of Vincent et al makes it prima facie obvious to one of ordinary skill in the art at the time of the invention to develop a colorant composition with antimicrobial agents which can be used as ink for inkjet, electronic ink and also for electronic paper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MANU MANOHAR whose telephone number is

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(571)270-5752. The examiner can normally be reached on Mon - Thu 9.00AM to 4.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK Nolan can be reached on 571-272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MANU MANOHAR
Examiner
Art Unit 4161

MM

/Ashwin Mehta/
Primary Examiner, Technology Center 1600